10/532406(12) International application published under the patent cooperation treaty (pct)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 6 May 2004 (06.05.2004)

PCT

(10) International Publication Number WO 2004/037992 A2

(51) International Patent Classification7:

C12N

(21) International Application Number:

PCT/US2003/033551

(22) International Filing Date: 22 October 2003 (22.10.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/420,554

23 October 2002 (23.10.2002)

(71) Applicant (for all designated States except US): EX-ELIXIS, INC. [US/US]; P.O. Box 511, 170 Harbor Way, South San Francisco, CA 94083-0511 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PLOWMAN. Gregory, D. [US/US]; 35 Winding Way, San Carlos, CA 94070 (US). KARIM, Felix, D. [US/US]; 732 Laurel Drive, Walnut Creek, CA 94596 (US). SWIMMER, Candace [US/US]; 360 Arkansas Street, San Francisco, CA 94107 (US). HABECK, Hinrich, Alexander [DE/DE]; Gertrud-Baeumer-Str. 74, 72074 Tuebingen (DE). KOBLIZEK, Thomas, I. [DE/DE]; Gechtstrasse 31, 72074 Tuebingen (DE). SCHULTE-MERKER, Stefan [DE/DE]; Kronenstr. 17, 72070 Tuebingen (DE). LANGHEINRICH, Ulrike [DE/DE]; Derendinger Str. 104, 72072 Tuebingen (DE). STOTT, Gordon, Mark [GB/DE]; Quenstedtstrasse 24, 72076 Tuebingen (DE). TROWE, Torsten [DE/DE]; Im Waegner 23, 72070 Tuebingen (DE). VOGEL, Andreas, Michael [DE/DE]; Linsenbergstrasse 12, 72074 Tuebingen (DE). ODEN-THAL, Joerg, Heinrich [DE/DE]; Otto-Erbe-Weg 18, 72070 Tuebingen (DE). SCHEEL, Jochen, Konrad [DE/DE]; Eduard-Spranger-Strasse 72, 72076 Tuebingen (DE). WILL, Torsten, Tilmann [DE/DE]; Eichenweg 2, 72076 Tuebingen (DE). JIN, Yisheng [CN/US]; 192 36th Avenue, Apt.B, San Mateo, CA 94403 (US). ADAMKEWICZ, Joanne, I. [US/US]; 1249 Rhode Island Street, San Francisco, CA 94107 (US).

- (74) Agents: SHAYESTEH, Laleh et al.; Exelixis, Inc., P. O. Box 511, 170 Harbor Way, South San Francisco, CA 94083-0511 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MAPK7 AS MODIFIER OF BRANCHING MORPHOGENESIS AND METHODS OF USE

(57) Abstract: Human MAPK7 genes are identified as modulators of branching morphogenesis, and thus are therapeutic targets for disorders associated with defective branching morphogenesis function. Methods for identifying modulators of branching morphogenesis, comprising screening for agents that modulate the activity of MAPK7 are provided.